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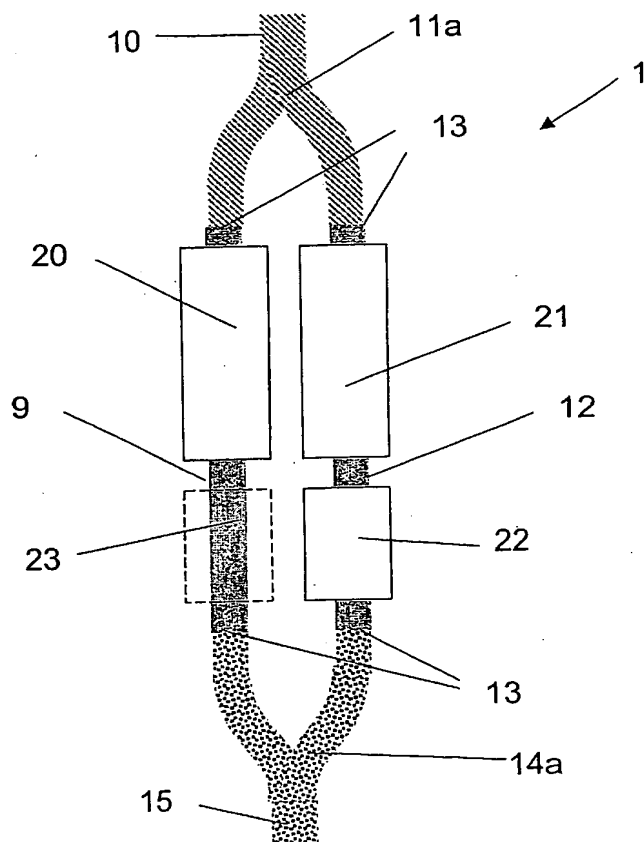
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- (71) Applicant (for all designated States except US): **PIRELLI & C. S.P.A.** [IT/IT]; Via Gaetano Negri, 10, I-20123 Milano (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **GHIDINI, Silvia** [IT/IT]; Pirelli Labs S.p.A., Viale Sarca, 222, I-20126 Milano (IT). **NESPOLA, Antonio** [IT/IT]; Pierlli Labs S.p.A., Viale Sarca, 222, I-20126 Milano (IT).
- (74) Agents: **GIANNESI, Simona et al.**; Porta, Checcacci & Associati S.P.A., Via Trebbia, 20, I-20135 Milano (IT).
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(54) Title: **OPTICAL MODULATOR**



(57) Abstract: An optical modulator (1) comprising an optical splitter (11a; 11b) for splitting an input light beam into a first and second light beam; a first and a second waveguide arm (9, 12) connected to said optical splitter (11a; 11b) for receiving and transmitting therethrough said first and second light beam, respectively, said waveguide arms (9, 12) each including a core region (32) comprising a group IV semiconductor material or a combination of group IV semiconductor materials; an optical combiner (14a; 14b) connected to said first and second waveguide arm (9, 12) for receiving said first and second light beam and combine them into an output light beam, a first and a second electrode structure (20, 21) associated with said first and second waveguide arm (9, 12), respectively; a driving circuit (80) for supplying voltage to said first and second electrode structure (20, 21), characterized in that said driving circuit (80) is adapted to supply a first modulation voltage superimposed to a first bias voltage to the first electrode structure (20) and a second modulation voltage superimposed to a second bias voltage to the second electrode structure (21).



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